

# Kai-Hui Liu

## List of Publications by Year in descending order

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250  
papers

13,091  
citations

20817

60  
h-index

27406

106  
g-index

257  
all docs

257  
docs citations

257  
times ranked

16268  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolution of interlayer coupling in twisted molybdenum disulfide bilayers. Nature Communications, 2014, 5, 4966.	12.8	533
2	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. Science Bulletin, 2017, 62, 1074-1080.	9.0	454
3	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. Nature, 2019, 570, 91-95.	27.8	422
4	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS <sub>2</sub> Continuous Films. ACS Nano, 2017, 11, 12001-12007.	14.6	397
5	Quantification of light-enhanced ionic transport in lead iodide perovskite thin films and its solar cell applications. Light: Science and Applications, 2017, 6, e16243-e16243.	16.6	342
6	Two-Dimensional (C <sub>4</sub> H <sub>9</sub> NH <sub>3</sub> ) <sub>2</sub> PbBr <sub>4</sub> Perovskite Crystals for High-Performance Photodetector. Journal of the American Chemical Society, 2016, 138, 16612-16615.	13.7	341
7	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. Nature Nanotechnology, 2016, 11, 930-935.	31.5	330
8	Strong Second-Harmonic Generation in Atomic Layered GaSe. Journal of the American Chemical Society, 2015, 137, 7994-7997.	13.7	273
9	Optical Anisotropy of Black Phosphorus in the Visible Regime. Journal of the American Chemical Society, 2016, 138, 300-305.	13.7	273
10	Far-field nanoscale infrared spectroscopy of vibrational fingerprints of molecules with graphene plasmons. Nature Communications, 2016, 7, 12334.	12.8	237
11	Light-Independent Ionic Transport in Inorganic Perovskite and Ultrastable Cs-Based Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2017, 8, 4122-4128.	4.6	231
12	Observation of Strong Interlayer Coupling in MoS <sub>2</sub> /WS <sub>2</sub> Heterostructures. Advanced Materials, 2016, 28, 1950-1956.	21.0	225
13	Superlubricity between MoS <sub>2</sub> Monolayers. Advanced Materials, 2017, 29, 1701474.	21.0	220
14	High-Mobility Multilayered MoS <sub>2</sub> Flakes with Low Contact Resistance Grown by Chemical Vapor Deposition. Advanced Materials, 2017, 29, 1604540.	21.0	214
15	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. Nature Communications, 2018, 9, 3311.	12.8	213
16	Gate-tunable third-order nonlinear optical response of massless Dirac fermions in graphene. Nature Photonics, 2018, 12, 430-436.	31.4	194
17	An atlas of carbon nanotube optical transitions. Nature Nanotechnology, 2012, 7, 325-329.	31.5	186
18	Direct Synthesis of B <sup>+</sup> C <sup>-</sup> N Single-Walled Nanotubes by Bias-Assisted Hot Filament Chemical Vapor Deposition. Journal of the American Chemical Society, 2006, 128, 6530-6531.	13.7	176

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19	Sub-10 nm Nanopattern Architecture for 2D Material Field-Effect Transistors. Nano Letters, 2017, 17, 1065-1070.	9.1	172
20	Dual-coupling-guided epitaxial growth of wafer-scale single-crystal WS <sub>2</sub> monolayer on vicinal a-plane sapphire. Nature Nanotechnology, 2022, 17, 33-38.	31.5	171
21	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS <sub>2</sub> . ACS Nano, 2015, 9, 11296-11301.	14.6	167
22	Three-Dimensional Spirals of Atomic Layered MoS <sub>2</sub> . Nano Letters, 2014, 14, 6418-6423.	9.1	161
23	Atomic scale insights into structure instability and decomposition pathway of methylammonium lead iodide perovskite. Nature Communications, 2018, 9, 4807.	12.8	161
24	Interfacial engineering in graphene bandgap. Chemical Society Reviews, 2018, 47, 3059-3099.	38.1	153
25	Moiré Phonons in Twisted Bilayer MoS <sub>2</sub> . ACS Nano, 2018, 12, 8770-8780.	14.6	149
26	Simulations of Quantum Transport in Sub-5-nm Monolayer Phosphorene Transistors. Physical Review Applied, 2018, 10, .	3.8	144
27	Precise control of the interlayer twist angle in large scale MoS <sub>2</sub> homostructures. Nature Communications, 2020, 11, 2153.	12.8	142
28	Robust Stacking-Independent Ultrafast Charge Transfer in MoS <sub>2</sub> /WS <sub>2</sub> Bilayers. ACS Nano, 2017, 11, 12020-12026.	14.6	130
29	Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow. Advanced Materials, 2016, 28, 8968-8974.	21.0	128
30	Monitoring Local Strain Vector in Atomic-Layered MoSe <sub>2</sub> by Second-Harmonic Generation. Nano Letters, 2017, 17, 7539-7543.	9.1	128
31	Graphene photonic crystal fibre with strong and tunable light-matter interaction. Nature Photonics, 2019, 13, 754-759.	31.4	127
32	Correlations between Immobilizing Ions and Suppressing Hysteresis in Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 266-272.	17.4	118
33	Seeded growth of large single-crystal copper foils with high-index facets. Nature, 2020, 581, 406-410.	27.8	116
34	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. Advanced Materials, 2018, 30, 1702944.	21.0	113
35	Converting Metallic Single-Walled Carbon Nanotubes into Semiconductors by Boron/Nitrogen Co-Doping. Advanced Materials, 2008, 20, 3615-3619.	21.0	112
36	Photoelectric conversion on Earth's surface via widespread Fe- and Mn-mineral coatings. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9741-9746.	7.1	111

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37	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. Nature Communications, 2017, 8, 15549.	12.8	104
38	In situ TEM studies of oxygen vacancy migration for electrically induced resistance change effect in cerium oxides. Micron, 2010, 41, 301-305.	2.2	100
39	Engineering active edge sites of fractal-shaped single-layer MoS <sub>2</sub> catalysts for high-efficiency hydrogen evolution. Nano Energy, 2018, 51, 786-792.	16.0	98
40	Optical fibres with embedded two-dimensional materials for ultrahigh nonlinearity. Nature Nanotechnology, 2020, 15, 987-991.	31.5	94
41	Multiwall Boron Carbonitride/Carbon Nanotube Junction and Its Rectification Behavior. Journal of the American Chemical Society, 2007, 129, 9562-9563.	13.7	93
42	High-throughput optical imaging and spectroscopy of individual carbon nanotubes in devices. Nature Nanotechnology, 2013, 8, 917-922.	31.5	92
43	Interlayer State-Coupling Dependent Ultrafast Charge Transfer in MoS <sub>2</sub> /WS <sub>2</sub> Bilayers. Advanced Science, 2017, 4, 1700086.	11.2	87
44	Direct observation of highly confined phonon polaritons in suspended monolayer hexagonal boron nitride. Nature Materials, 2021, 20, 43-48.	27.5	84
45	Kinetic modulation of graphene growth by fluorine through spatially confined decomposition of metal fluorides. Nature Chemistry, 2019, 11, 730-736.	13.6	82
46	Photoconducting response on bending of individual ZnO nanowires. Journal of Materials Chemistry, 2009, 19, 1002-1005.	6.7	80
47	Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals. Advanced Materials, 2019, 31, e1806562.	21.0	79
48	Chirality-Dependent Transport Properties of Double-Walled Nanotubes Measured in Situ on Their Field-Effect Transistors. Journal of the American Chemical Society, 2009, 131, 62-63.	13.7	76
49	Controllable Growth of Aligned Monocrystalline CsPbBr <sub>3</sub> Microwire Arrays for Piezoelectric-Induced Dynamic Modulation of Single-Mode Lasing. Advanced Materials, 2019, 31, e1900647.	21.0	76
50	Fast Growth of Strain-Free AlN on Graphene-Buffered Sapphire. Journal of the American Chemical Society, 2018, 140, 11935-11941.	13.7	75
51	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. ACS Nano, 2015, 9, 6478-6483.	14.6	72
52	Product-Specific Active Site Motifs of Cu for Electrochemical CO <sub>2</sub> Reduction. Chem, 2021, 7, 406-420.	11.7	72
53	Designed Growth of Large-Size 2D Single Crystals. Advanced Materials, 2020, 32, e2000046.	21.0	71
54	Graphene charge-injection photodetectors. Nature Electronics, 2022, 5, 281-288.	26.0	70

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55	Systematic determination of absolute absorption cross-section of individual carbon nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7564-7569.	7.1	69
56	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide SnS <sub>2</sub> nanostructures. Nano Energy, 2017, 32, 302-309.	16.0	69
57	Growth of High-Density-Aligned and Semiconducting-Enriched Single-Walled Carbon Nanotubes: Decoupling the Conflict between Density and Selectivity. ACS Nano, 2014, 8, 554-562.	14.6	68
58	Green Synthesis of Porous Cocoon-like rGO for Enhanced Microwave-Absorbing Performances. ACS Applied Materials & Interfaces, 2018, 10, 42865-42874.	8.0	68
59	Elastic Properties and Fracture Behaviors of Biaxially Deformed, Polymorphic MoTe <sub>2</sub> . Nano Letters, 2019, 19, 761-769.	9.1	67
60	Scalable and ultrafast epitaxial growth of single-crystal graphene wafers for electrically tunable liquid-crystal microlens arrays. Science Bulletin, 2019, 64, 659-668.	9.0	66
61	Doping-Induced Second-Harmonic Generation in Centrosymmetric Graphene from Quadrupole Response. Physical Review Letters, 2019, 122, 047401.	7.8	64
62	Van der Waals-coupled electronic states in incommensurate double-walled carbon nanotubes. Nature Physics, 2014, 10, 737-742.	16.7	63
63	Ultra-Broadband Strong Electromagnetic Interference Shielding with Ferromagnetic Graphene Quartz Fabric. Advanced Materials, 2022, 34, .	21.0	60
64	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS <sub>2</sub> . Nano Letters, 2016, 16, 5582-5588.	9.1	58
65	Reversible Healing Effect of Water Molecules on Fully Crystallized Metal-Halide Perovskite Film. Journal of Physical Chemistry C, 2016, 120, 4759-4765.	3.1	55
66	Quantum-coupled radial-breathing oscillations in double-walled carbon nanotubes. Nature Communications, 2013, 4, 1375.	12.8	54
67	Continuously Graded Quantum Dots: Synthesis, Applications in Quantum Dot Light-Emitting Diodes, and Perspectives. Journal of Physical Chemistry Letters, 2021, 12, 5967-5978.	4.6	53
68	In situ probing mechanical properties of individual tungsten oxide nanowires directly grown on tungsten tips inside transmission electron microscope. Applied Physics Letters, 2006, 89, 221908.	3.3	52
69	Epitaxy of Single-Crystalline GaN Film on CMOS-Compatible Si(100) Substrate Buffered by Graphene. Advanced Functional Materials, 2019, 29, 1905056.	14.9	51
70	Creating polar antivortex in PbTiO <sub>3</sub> /SrTiO <sub>3</sub> superlattice. Nature Communications, 2021, 12, 2054.	12.8	50
71	Giant enhancement of optical nonlinearity in two-dimensional materials by multiphoton-excitation resonance energy transfer from quantum dots. Nature Photonics, 2021, 15, 510-515.	31.4	50
72	New Pathway for Hot Electron Relaxation in Two-Dimensional Heterostructures. Nano Letters, 2018, 18, 6057-6063.	9.1	49

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73	Atomic imaging of mechanically induced topological transition of ferroelectric vortices. Nature Communications, 2020, 11, 1840.	12.8	49
74	Sensitive and Robust Ultraviolet Photodetector Array Based on Self-Assembled Graphene/C <sub>60</sub> Hybrid Films. ACS Applied Materials & Interfaces, 2018, 10, 38326-38333.	8.0	48
75	Measuring phonon dispersion at an interface. Nature, 2021, 599, 399-403.	27.8	47
76	Importance of Diameter Control on Selective Synthesis of Semiconducting Single-Walled Carbon Nanotubes. ACS Nano, 2014, 8, 8564-8572.	14.6	45
77	Nanoassembly Growth Model for Subdomain and Grain Boundary Formation in 1Tâ€² Layered ReS <sub>2</sub> . Advanced Functional Materials, 2019, 29, 1906385.	14.9	45
78	2D Polarized Materials: Ferromagnetic, Ferrovalley, Ferroelectric Materials, and Related Heterostructures. Advanced Materials, 2021, 33, e2004469.	21.0	45
79	Efficient All-Optical Plasmonic Modulators with Atomically Thin Van Der Waals Heterostructures. Advanced Materials, 2020, 32, e1907105.	21.0	44
80	Tuning the photo-response in monolayer MoS <sub>2</sub> by plasmonic nano-antenna. Scientific Reports, 2016, 6, 23626.	3.3	43
81	Massive Growth of Graphene Quartz Fiber as a Multifunctional Electrode. ACS Nano, 2020, 14, 5938-5945.	14.6	43
82	In situ probing electrical response on bending of ZnO nanowires inside transmission electron microscope. Applied Physics Letters, 2008, 92, 213105.	3.3	42
83	High-Performance Photoinduced Memory with Ultrafast Charge Transfer Based on MoS <sub>2</sub> /SWCNTs Network Van Der Waals Heterostructure. Small, 2019, 15, e1804661.	10.0	42
84	Robust growth of two-dimensional metal dichalcogenides and their alloys by active chalcogen monomer supply. Nature Communications, 2022, 13, 1007.	12.8	42
85	BN-Enabled Epitaxy of Pb <sub>1-x</sub> Sn <sub>x</sub> Se Nanoplates on SiO <sub>2</sub> /Si for High-Performance Mid-Infrared Detection. Small, 2015, 11, 5388-5394.	10.0	41
86	Atomic-scale observations of electrical and mechanical manipulation of topological polar flux closure. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18954-18961.	7.1	41
87	Graphene-Assisted Epitaxy of Nitrogen Lattice Polarity GaN Films on Non-Polar Sapphire Substrates for Green Light Emitting Diodes. Advanced Functional Materials, 2020, 30, 2001283.	14.9	41
88	Layer-by-layer epitaxy of multi-layer MoS <sub>2</sub> wafers. National Science Review, 2022, 9, .	9.5	41
89	The Way towards Ultrafast Growth of Single-Crystal Graphene on Copper. Advanced Science, 2017, 4, 1700087.	11.2	40
90	Cr-Doped Pd Metallene Endows a Practical Formaldehyde Sensor New Limit and High Selectivity. Advanced Materials, 2022, 34, e2105276.	21.0	40

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91	Ultrafast nonlinear photoresponse of single-wall carbon nanotubes: a broadband degenerate investigation. <i>Nanoscale</i> , 2016, 8, 9304-9309.	5.6	39
92	2D Materials: Superlubricity between MoS <sub>2</sub> Monolayers ( <i>Adv. Mater.</i> 27/2017). <i>Advanced Materials</i> , 2017, 29, .	21.0	38
93	Unique Transformation from Graphene to Carbide on Re(0001) Induced by Strong Carbon-Metal Interaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 17574-17581.	13.7	38
94	Controllable Growth of (n, n + 1) Family of Semiconducting Carbon Nanotubes. <i>CheM</i> , 2019, 5, 1182-1193.	11.7	38
95	Carbon Nanotubes as an Ultrafast Emitter with a Narrow Energy Spread at Optical Frequency. <i>Advanced Materials</i> , 2017, 29, 1701580.	21.0	37
96	Atomic-scale imaging of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> structure and its decomposition pathway. <i>Nature Communications</i> , 2021, 12, 5516.	12.8	36
97	The Coalescence Behavior of Two-Dimensional Materials Revealed by Multiscale <i>In Situ</i> Imaging during Chemical Vapor Deposition Growth. <i>ACS Nano</i> , 2020, 14, 1902-1918.	14.6	35
98	Superstable copper nanowire network electrodes by single-crystal graphene covering and their applications in flexible nanogenerator and light-emitting diode. <i>Nano Energy</i> , 2020, 71, 104638.	16.0	35
99	Intrinsic radial breathing oscillation in suspended single-walled carbon nanotubes. <i>Physical Review B</i> , 2011, 83, .	3.2	34
100	SWCNT-MoS <sub>2</sub> -SWCNT Vertical Point Heterostructures. <i>Advanced Materials</i> , 2017, 29, 1604469.	21.0	32
101	Ultrafast Catalyst-Free Graphene Growth on Glass Assisted by Local Fluorine Supply. <i>ACS Nano</i> , 2019, 13, 10272-10278.	14.6	32
102	Characteristics of desert varnish from nanometer to micrometer scale: A photo-oxidation model on its formation. <i>Chemical Geology</i> , 2019, 522, 55-70.	3.3	32
103	Universal Imaging of Full Strain Tensor in 2D Crystals with Third-Harmonic Generation. <i>Advanced Materials</i> , 2019, 31, e1808160.	21.0	32
104	Subunit cell-level measurement of polarization in an individual polar vortex. <i>Science Advances</i> , 2019, 5, eaav4355.	10.3	31
105	Ultrafast Optical Modulation of Harmonic Generation in Two-Dimensional Materials. <i>Nano Letters</i> , 2020, 20, 8053-8058.	9.1	31
106	Probing the crystallographic orientation of two-dimensional atomic crystals with supramolecular self-assembly. <i>Nature Communications</i> , 2017, 8, 377.	12.8	30
107	Extending Absorption of Cs <sub>2</sub> AgBiBr <sub>6</sub> to Near-Infrared Region (λ <sup>0</sup> 1350Ånm) with Intermediate Band. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	30
108	Ultrafast Broadband Charge Collection from Clean Graphene/CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Interface. <i>Journal of the American Chemical Society</i> , 2018, 140, 14952-14957.	13.7	29

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109	Broadband Spectral Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in $\text{In}_2\text{Te}_3$ . <i>Advanced Materials</i> , 2020, 32, 2002014.	21.0	29
110	Pushing the conductance and transparency limit of monolayer graphene electrodes for flexible organic light-emitting diodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 25991-25998.	7.1	28
111	Interfacial Engineering of Van der Waals Coupled 2D Layered Materials. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601054.	3.7	26
112	Tracking sodium migration in $\text{TiS}_2$ using <i>in situ</i> TEM. <i>Nanoscale</i> , 2019, 11, 7474-7480.	5.6	26
113	Polarized Water Driven Dynamic PN Junction-Based Direct-Current Generator. <i>Research</i> , 2021, 2021, 7505638.	5.7	26
114	Broadband nonlinear optical response of monolayer $\text{MoSe}_2$ under ultrafast excitation. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	25
115	Single-mode lasing of $\text{CsPbBr}_3$ perovskite NWs enabled by the Vernier effect. <i>Nanoscale</i> , 2021, 13, 4432-4438.	5.6	25
116	Epitaxy of 2D Materials toward Single Crystals. <i>Advanced Science</i> , 2022, 9, e2105201.	11.2	24
117	Surface-Facet-Dependent Phonon Deformation Potential in Individual Strained Topological Insulator $\text{Bi}_2\text{Se}_3$ Nanoribbons. <i>ACS Nano</i> , 2015, 9, 10244-10251.	14.6	23
118	High Conversion Efficiency Carbon Nanotube-Based Barrier-Free Bipolar-Diode Photodetector. <i>ACS Nano</i> , 2016, 10, 9595-9601.	14.6	23
119	Gate Switching of Ultrafast Photoluminescence in Graphene. <i>Nano Letters</i> , 2018, 18, 7985-7990.	9.1	23
120	Reconstruction of structured laser beams through a multimode fiber based on digital optical phase conjugation. <i>Optics Letters</i> , 2018, 43, 3333.	3.3	23
121	Visualizing grain boundaries in monolayer $\text{MoSe}_2$ using mild $\text{H}_2\text{O}$ vapor etching. <i>Nano Research</i> , 2018, 11, 4082-4089.	10.4	22
122	Chemical Intercalation of Topological Insulator Grid Nanostructures for High-Performance Transparent Electrodes. <i>Advanced Materials</i> , 2017, 29, 1703424.	21.0	21
123	Selective growth of chirality-enriched semiconducting carbon nanotubes by using bimetallic catalysts from salt precursors. <i>Nanoscale</i> , 2018, 10, 6922-6927.	5.6	21
124	Polarizer-free polarimetric image sensor through anisotropic two-dimensional $\text{GeSe}$ . <i>Science China Materials</i> , 2021, 64, 1230-1237.	6.3	21
125	Direct determination of atomic structure of large-indexed carbon nanotubes by electron diffraction: application to double-walled nanotubes. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 125412.	2.8	20
126	Direct Current Electricity Generation from Dynamic Polarized Water-Semiconductor Interface. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14180-14187.	3.1	20



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127	Engineering polar vortex from topologically trivial domain architecture. Nature Communications, 2021, 12, 4620.	12.8	20
128	Eukaryotic microbial communities in hypersaline soils and sediments from the alkaline hypersaline Huama Lake as revealed by 454 pyrosequencing. Antonie Van Leeuwenhoek, 2014, 105, 871-880.	1.7	19
129	Photovoltaic Effect and Evidence of Carrier Multiplication in Graphene Vertical Homojunctions with Asymmetrical Metal Contacts. ACS Nano, 2015, 9, 8851-8858.	14.6	19
130	Lattice Polarity Manipulation of Quasi-2D Epitaxial GaN Films on Graphene Through Interface Atomic Configuration. Advanced Materials, 2022, 34, e2106814.	21.0	19
131	Measurement of complex optical susceptibility for individual carbon nanotubes by elliptically polarized light excitation. Nature Communications, 2018, 9, 3387.	12.8	18
132	Emerging properties of two-dimensional twisted bilayer materials*. Chinese Physics B, 2019, 28, 107304.	1.4	18
133	Direct observation of weakened interface clamping effect enabled ferroelastic domain switching. Acta Materialia, 2019, 171, 184-189.	7.9	18
134	Sub-10 nm stable graphene quantum dots embedded in hexagonal boron nitride. Nanoscale, 2019, 11, 4226-4230.	5.6	18
135	Colors of Single-Wall Carbon Nanotubes. Advanced Materials, 2021, 33, e2006395.	21.0	18
136	Complete structural characterization of single carbon nanotubes by Rayleigh scattering circular dichroism. Nature Nanotechnology, 2021, 16, 1073-1078.	31.5	18
137	Identification of Copper Surface Index by Optical Contrast. Advanced Materials Interfaces, 2018, 5, 1800377.	3.7	17
138	Strong-coupled hybrid structure of carbon nanotube and MoS <sub>2</sub> monolayer with ultrafast interfacial charge transfer. Nanoscale, 2019, 11, 17195-17200.	5.6	17
139	The Impacts of Adhesion on the Wear Property of Graphene. Advanced Materials Interfaces, 2019, 6, 1900721.	3.7	17
140	Negative friction coefficient in microscale graphite/mica layered heterojunctions. Science Advances, 2020, 6, eaaz6787.	10.3	17
141	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS <sub>2</sub> . ACS Nano, 2020, 14, 6897-6905.	14.6	17
142	Giant Valley Coherence at Room Temperature in 3R WS <sub>2</sub> with Broken Inversion Symmetry. Research, 2019, 2019, 6494565.	5.7	17
143	Ultralong aligned single-walled carbon nanotubes on flexible fluorophlogopite mica for strain sensors. Nano Research, 2012, 5, 443-449.	10.4	16
144	Extreme nonlinear strong-field photoemission from carbon nanotubes. Nature Communications, 2019, 10, 4891.	12.8	16

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145	Enhanced Electrochemical Methanation of Carbon Dioxide at the Single-Layer Hexagonal Boron Nitride/Cu Interfacial Perimeter. <i>Nano Letters</i> , 2021, 21, 4469-4476.	9.1	16
146	Higher-order harmonic resonances and mechanical properties of individual cadmium sulphide nanowires measured by in situ transmission electron microscopy. <i>Journal of Electron Microscopy</i> , 2010, 59, 285-289.	0.9	15
147	Rotational scanning and multiple-spot focusing through a multimode fiber based on digital optical phase conjugation. <i>Applied Physics Express</i> , 2018, 11, 062501.	2.4	15
148	Rich information on 2D materials revealed by optical second harmonic generation. <i>Nanoscale</i> , 2020, 12, 22891-22903.	5.6	15
149	Engineering of atomic-scale flexoelectricity at grain boundaries. <i>Nature Communications</i> , 2022, 13, 216.	12.8	14
150	A simple method to tune graphene growth between monolayer and bilayer. <i>AIP Advances</i> , 2016, 6, .	1.3	13
151	Real-time Observation of Carbon Nanotube Etching Process Using Polarized Optical Microscope. <i>Advanced Materials</i> , 2017, 29, 1701959.	21.0	13
152	Quiver-quenched optical-field-emission from carbon nanotubes. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	13
153	Unveiling the Fine Structural Distortion of Atomically Thin Bi <sub>2</sub> O <sub>2</sub> Se by Third-Harmonic Generation. <i>Advanced Materials</i> , 2020, 32, e2002831.	21.0	13
154	Silicon Thermo-Optic Switches with Graphene Heaters Operating at Mid-Infrared Waveband. <i>Nanomaterials</i> , 2022, 12, 1083.	4.1	13
155	Sandwiched graphene/hBN/graphene photonic crystal fibers with high electro-optical modulation depth and speed. <i>Nanoscale</i> , 2020, 12, 14472-14478.	5.6	12
156	Atomic origin of spin-valve magnetoresistance at the SrRuO <sub>3</sub> grain boundary. <i>National Science Review</i> , 2020, 7, 755-762.	9.5	12
157	Augmenting photoluminescence of monolayer MoS <sub>2</sub> using high order modes in a metal dimer-on-film nanocavity. <i>Photonics Research</i> , 2021, 9, 501.	7.0	12
158	High-throughput Determination of Statistical Structure Information for Horizontal Carbon Nanotube Arrays by Optical Imaging. <i>Advanced Materials</i> , 2016, 28, 2018-2023.	21.0	11
159	Ultralow-frequency Raman system down to 10 cm <sup>-1</sup> with longpass edge filters and its application to the interface coupling in t(2+2)LGs. <i>Review of Scientific Instruments</i> , 2016, 87, 053122.	1.3	11
160	Multiple electronic Raman scatterings in a single metallic carbon nanotube. <i>Physical Review B</i> , 2016, 93, .	3.2	11
161	Robust circular polarization of indirect Q-K transitions in bilayer $W_3R_3S_2$ . <i>Physical Review B</i> , 2019, 100, .	3.2	11
162	Giant All-Optical Modulation of Second-Harmonic Generation Mediated by Dark Excitons. <i>ACS Photonics</i> , 2021, 8, 2320-2328.	6.6	11

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163	Anisotropic Carrier Mobility from 2H WSe <sub>2</sub> . <i>Advanced Materials</i> , 2022, 34, e2108615.	21.0	11
164	Enhanced Photoluminescence of Monolayer MoSe <sub>2</sub> in a Double Resonant Plasmonic Nanocavity with Fano Resonance and Mode Matching. <i>Laser and Photonics Reviews</i> , 2022, 16, .	8.7	11
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